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I hereby certify that the correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: September 28, 2005

Signature

Gerard P Norton
(Gerard P. Norton)

Docket No. RUT0001-00US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: :
Gaetano T. Montelione et al. :
: Application No.: 10/536,705 :
: Filed: May 27, 2005 :
: For: RIBOSOMAL RNA :
: METHYLTRANSFERASES RlmA: :
: TARGET VALIDATION AND PROCESSES :
: FOR DEVELOPING AN INHIBITOR ASSAY :
: AND IDENTIFICATION OF CANDIDATE :
: INHIBITORS :
X

INFORMATION DISCLOSURE STATEMENT

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with Applicants' duty of disclosure under 37 C.F.R. §1.56, and in accordance with 37 C.F.R. §§ 1.97-1.98, applicant submits the enclosed form PTO-1449 listing references for the Examiner's consideration for the above-listed patent application. This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and therefore no fee is supplied in accordance with 37 C.F.R. § 1.97(b)(3).

All of the listed references are being submitted herewith. The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, and

Appl. No.: 536,705
Filed: May 27, 2005

shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

If there are any questions, Applicant's attorney can be reached at the telephone number stated below.

Respectfully submitted,

NORTON & DIEHL, LLC
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Clark, NJ 07066

Dated: September 28, 2005

By: Gerard P. Norton

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Substitute for form 1449A/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
 (Use as many sheets as necessary)



Complete if Known	
Application Number	10/536,705
Filing Date	May 27, 2005
First Named Inventor	Montelione, Gaetano T.
Group Art Unit	Unknown
Examiner Name	Unknown

Sheet 1 of 5 Attorney Docket No: RUT0001-00US

US PATENT DOCUMENTS

Examiner Initials*	Cite No.*	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-4,946,778	08/07/1990	Ladner, Robert C., et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.*	Foreign Document No Country Code – Number – Kind Code (If known)	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
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OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BAN, N , et al., "The complete atomic structure of the large ribosomal subunit at 2.4 A resolution.", <u>Science</u> , 289(5481), (Aug. 11, 2000),905-920	
		BRIMACOMBE, R , et al., "Clustering of modified nucleotides at the functional center of bacterial ribosomal RNA.", <u>FASEB J.</u> , 7(1), (Jan. 1993),161-167	
		BUSSIÈRE, D E., et al., "Crystal structure of ErmC', an rRNA methyltransferase which mediates antibiotic resistance in bacteria.", <u>Biochemistry</u> , 37(20), (May 19, 1998),7103-7112	
		CRAMER, PATRICK , "Architecture of RNA polymerase II and implications for the transcription mechanism.", <u>Science</u> , 288(5466), (Apr 28 2000),640-649	
		DEVLIN, JAMES J., "Random Peptide Libraries: A Source of Specific Protein Binding Molecules", <u>Science</u> , 249, (1990),404-406	

EXAMINER

DATE CONSIDERED

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
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		Group Art Unit	Unknown
		Examiner Name	Unknown
Sheet 2 of 5		Attorney Docket No: RUT0001-00US	

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS			
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		GOUET, P , et al., "ESPrift: analysis of multiple sequence alignments in PostScript.", <u>Bioinformatics</u> , 15(4), (Apr. 1999),305-308	
		GUSTAFSSON, C , et al., "Identification of the rrmA gene encoding the 23S rRNA m1G745 methyltransferase in Escherichia coli and characterization of an m1G745-deficient mutant.", <u>J Bacteriol.</u> , 180(2), (Jan. 1998),359-365	
		HANSEN, J L., et al., "The structures of four macrolide antibiotics bound to the large ribosomal subunit.", <u>Mol Cell.</u> , 10(1), (Jul. 2002),117-128	
		HOWELL, P L., et al., "Optimizing DREAR and SnB parameters for determining Se-atom substructures.", <u>Acta Crystallogr D Biol Crystallogr.</u> , 56 (Pt 5), (May 2000),604-617	
		JONES, T A., et al., "Improved methods for building protein models in electron density maps and the location of errors in these models.", <u>Acta Crystallogr A.</u> , 47 (Pt 2), (Mar. 1991),110-119	
		KAGAN, R M., et al., "Widespread occurrence of three sequence motifs in diverse S-adenosylmethionine-dependent methyltransferases suggests a common structure for these enzymes.", <u>Arch Biochem Biophys.</u> , 310(2), (May 1, 1994),417-427	
		KOEHL, P , et al., "A brighter future for protein structure prediction", <u>Nature Struct. Biology</u> , 6(2), (Feb. 1999),108-111	
		LEBARS, I , et al., "Structure of 23S rRNA hairpin 35 and its interaction with the tylosin-resistance methyltransferase RlmAII.", <u>EMBO J.</u> , 22(2), (Jan. 15, 2003),183-192	

EXAMINER

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Substitute for form 1449A/PTO
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First Named Inventor Montelione, Gaetano T.

Group Art Unit Unknown

Examiner Name Unknown

Sheet 3 of 5

Attorney Docket No: RUT0001-00US

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		LIU, MINGFU , et al., "Methylation at nucleotide G745 or G748 in 23S rRNA distinguishes Gram-negative from Gram-positive bacteria.", <u>Mol Microbiol.</u> , 44(1), (Apr. 2002), 195-204	
		LIU, MINGFU , et al., "Resistance to the macrolide antibiotic tylosin is conferred by single methylations at 23S rRNA nucleotides G748 and A2058 acting in synergy.", <u>Proc. Natl. Acad. Sci. U S A.</u> , 99(23), Epub 2002,(Nov. 12, 2002),14658-14663	
		LIU, MINGFU , et al., "The tylosin resistance gene <i>tlrB</i> of <i>Streptomyces fradiae</i> encodes a methyltransferase that targets G748 in 23S rRNA.", <u>Mol. Microbiol.</u> 37(4), (Aug. 2000),811-820	
		MEKLER, VLADIMIR A., "Structural organization of bacterial RNA polymerase holoenzyme and the RNA polymerase-promoter open complex.", <u>Cell.</u> 108(5), (Mar 8 2002),599-614	
		MUELLER, FLORIAN , et al., "The 3D arrangement of the 23 S and 5 S rRNA in the <i>Escherichia coli</i> 50 S ribosomal subunit based on a cryo-electron microscopic reconstruction at 7.5 Å resolution", <u>J. Mol Biol.</u> , 298(1), (Apr. 21, 2000),35-59	
		MUKHOPADHYAY, J , et al., "Antibacterial peptide microcin J25 inhibits transcription by binding within and obstructing the RNA polymerase secondary channel.", <u>Mol. Cell.</u> , 14(6), (Jun. 18, 2004),739-751	
		MUKHOPADHYAY, JAYANTA , "Translocation of sigma-70 with RNA Polymerase during Transcription: Fluorescence Resonance Energy Transfer Assay for Movement Relative to DNA", <u>Cell.</u> , 106, (Aug 24, 2001),453-463	
		MURSHUDOV, G N., et al., "Efficient anisotropic refinement of macromolecular structures using FFT.", <u>Acta Crystallogr D Biol Crystallogr.</u> , 55 (Pt 1), (Jan. 1999),247-255	

EXAMINER

DATE CONSIDERED

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
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		Examiner Name	Unknown
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		NAVAZA, J , "AMoRe: an automated package for molecular replacement", <u>Acta Cryst. A50</u> , (1994),157-163	
		NICHOLLS, A , et al., "Protein folding and association: insights from the interfacial and thermodynamic properties of hydrocarbons.", <u>Proteins</u> , 11(4), (1991),281-296	
		SCHLUNZEN, F , et al., "Structural basis for the interaction of antibiotics with the peptidyl transferase centre in eubacteria.", <u>Nature</u> , 413(6858), (Oct. 25, 2001),814-821	
		SCOTT, JAMIE K., "Searching for peptide ligands with an epitope library.", <u>Science</u> , 249(4967), (Jul 27 1990),386-390	
		SELVIN, P R., "The renaissance of fluorescence resonance energy transfer.", <u>Nat Struct Biol.</u> , 7(9), (Sep. 2000),730-734	
		VESTER, B , et al., "Macrolide resistance conferred by base substitutions in 23S rRNA.", <u>Antimicrob Agents Chemother.</u> , 45(1), (Jan. 2001),1-12	
		YUSUPOV, M M., et al., "Crystal structure of the ribosome at 5.5 Å resolution.", <u>Science</u> , 292(5518), (May 4, 2001),883-896	
		ZHANG, GONGYI , "Crystal structure of <i>Thermus aquaticus</i> core RNA polymerase at 3.3 Å resolution.", <u>Cell</u> , 98(6), (Sep 17 1999),811-824	

EXAMINER

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Examiner Name	Unknown
Sheet 5 of 5	Attorney Docket No: RUT0001-00US

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Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached